

1. 19.1

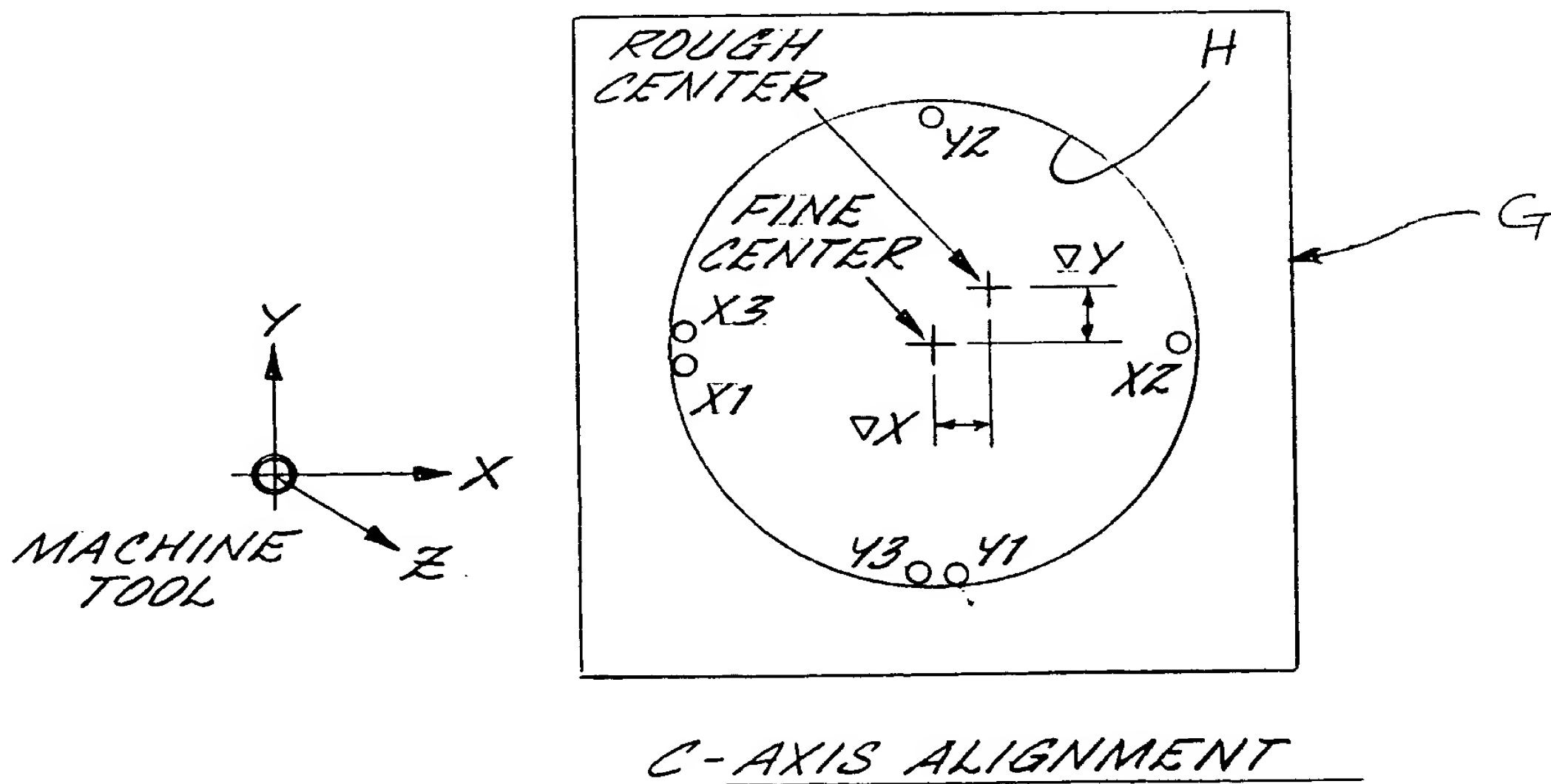
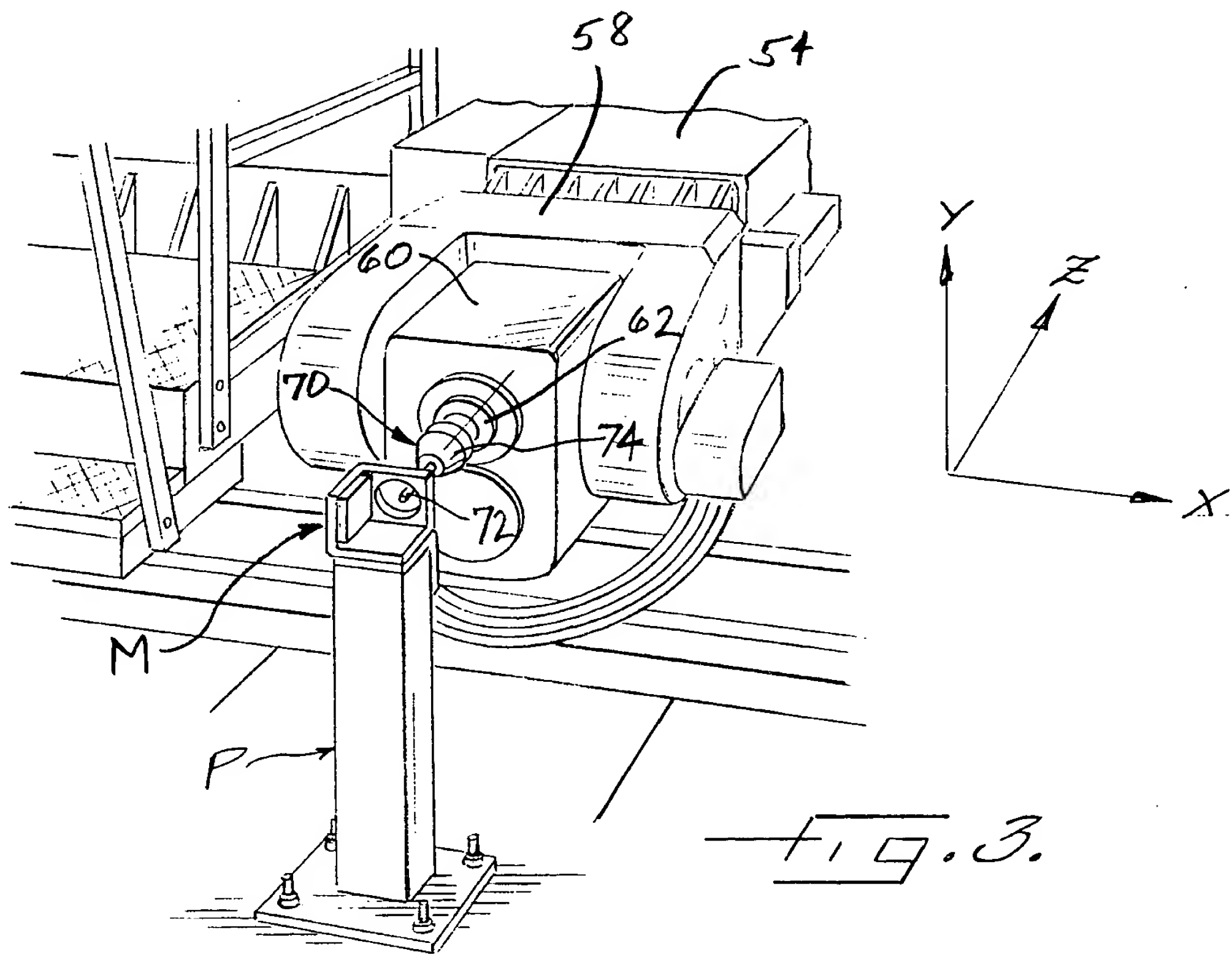


Fig. 4.

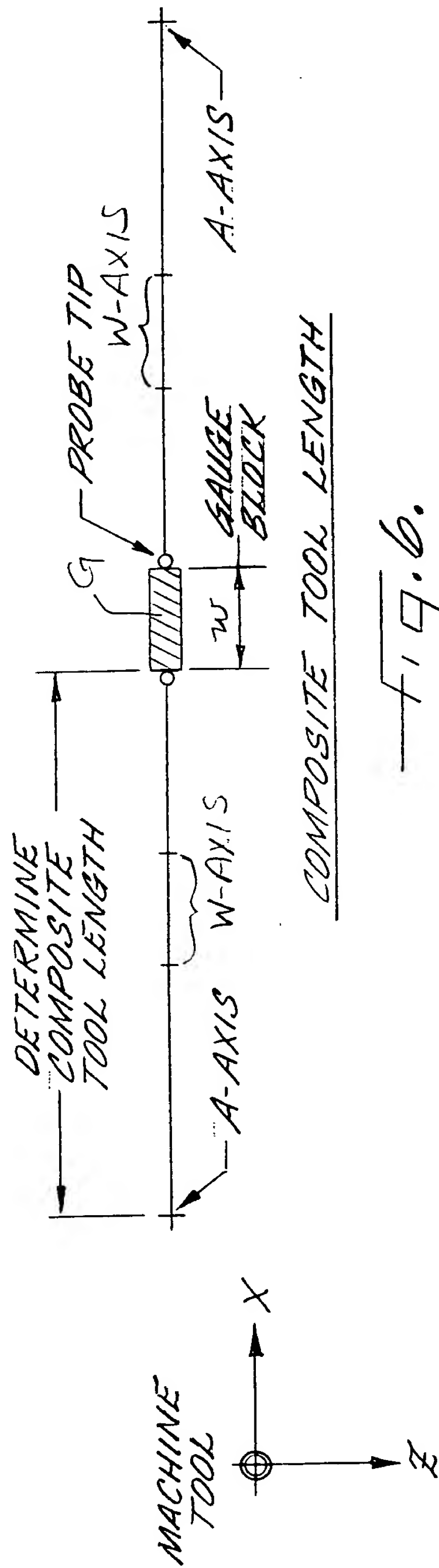
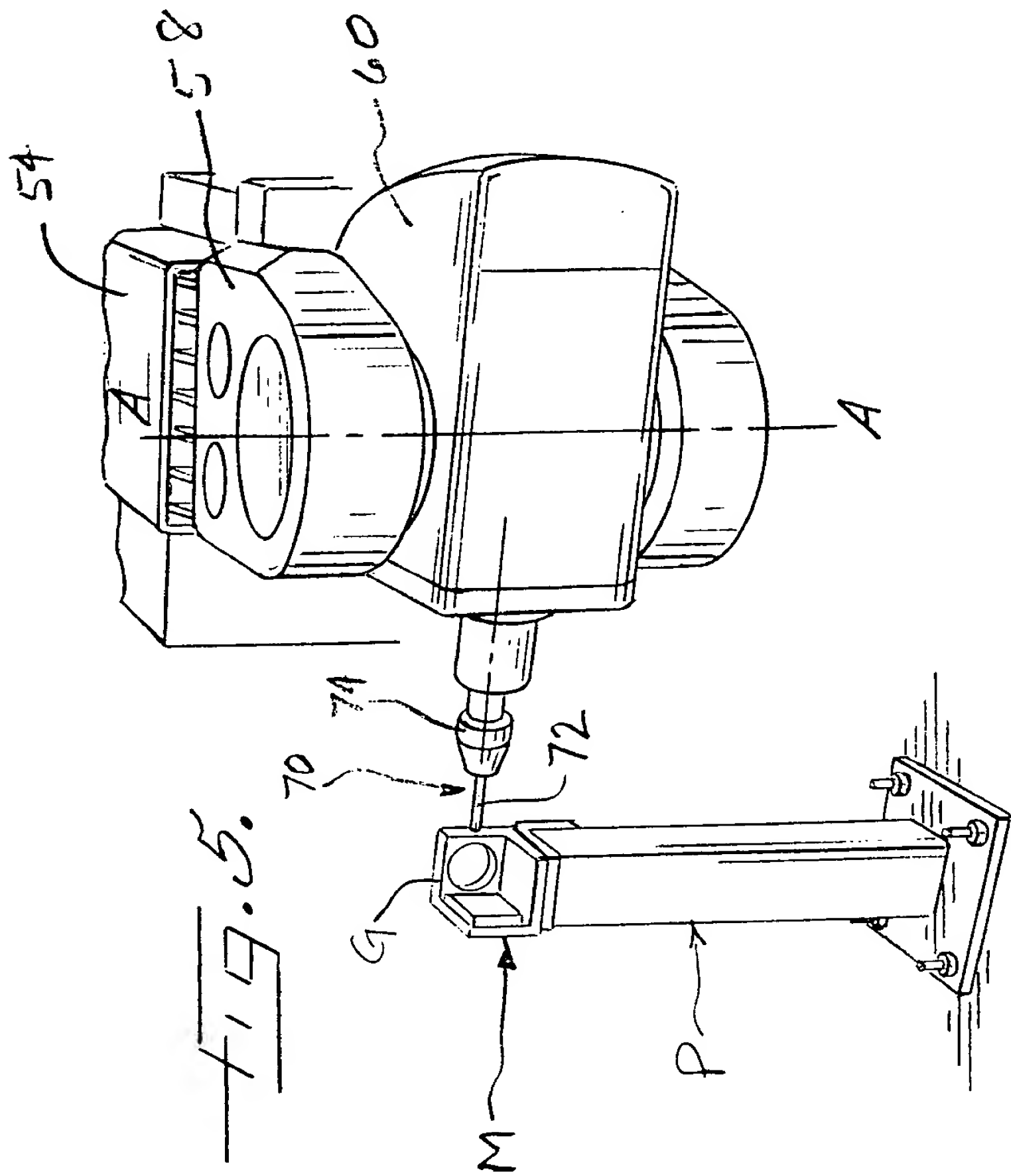
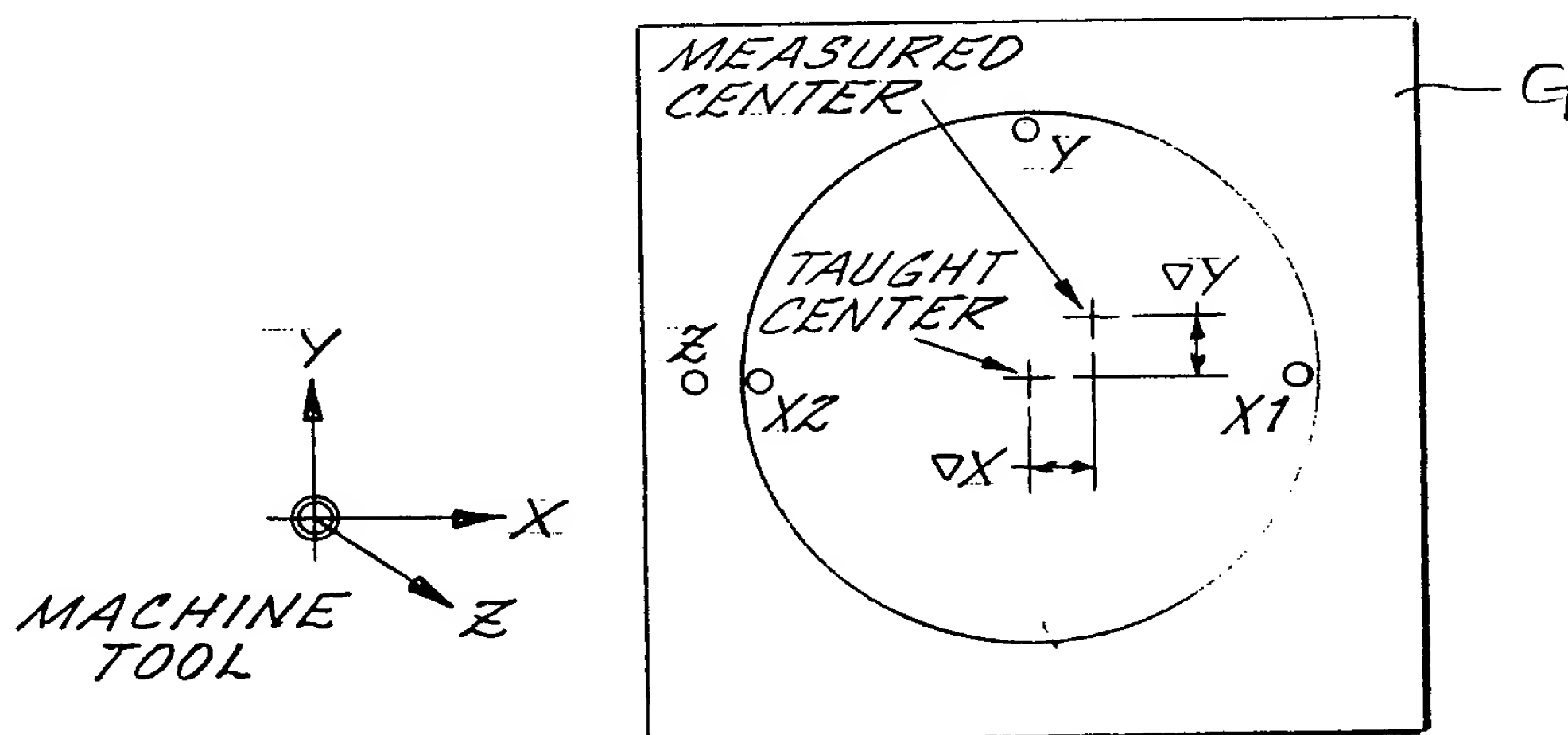
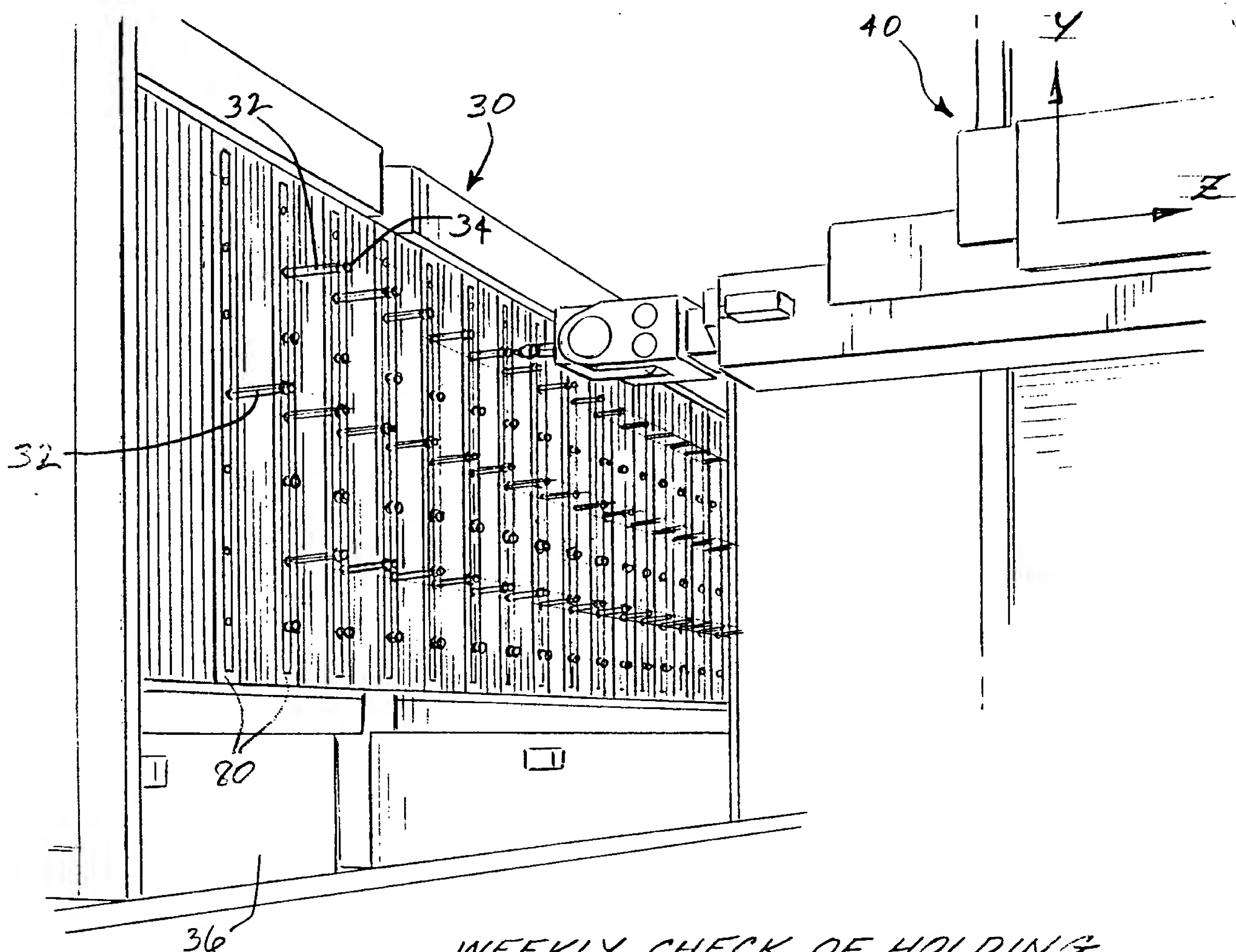


Fig. 7.



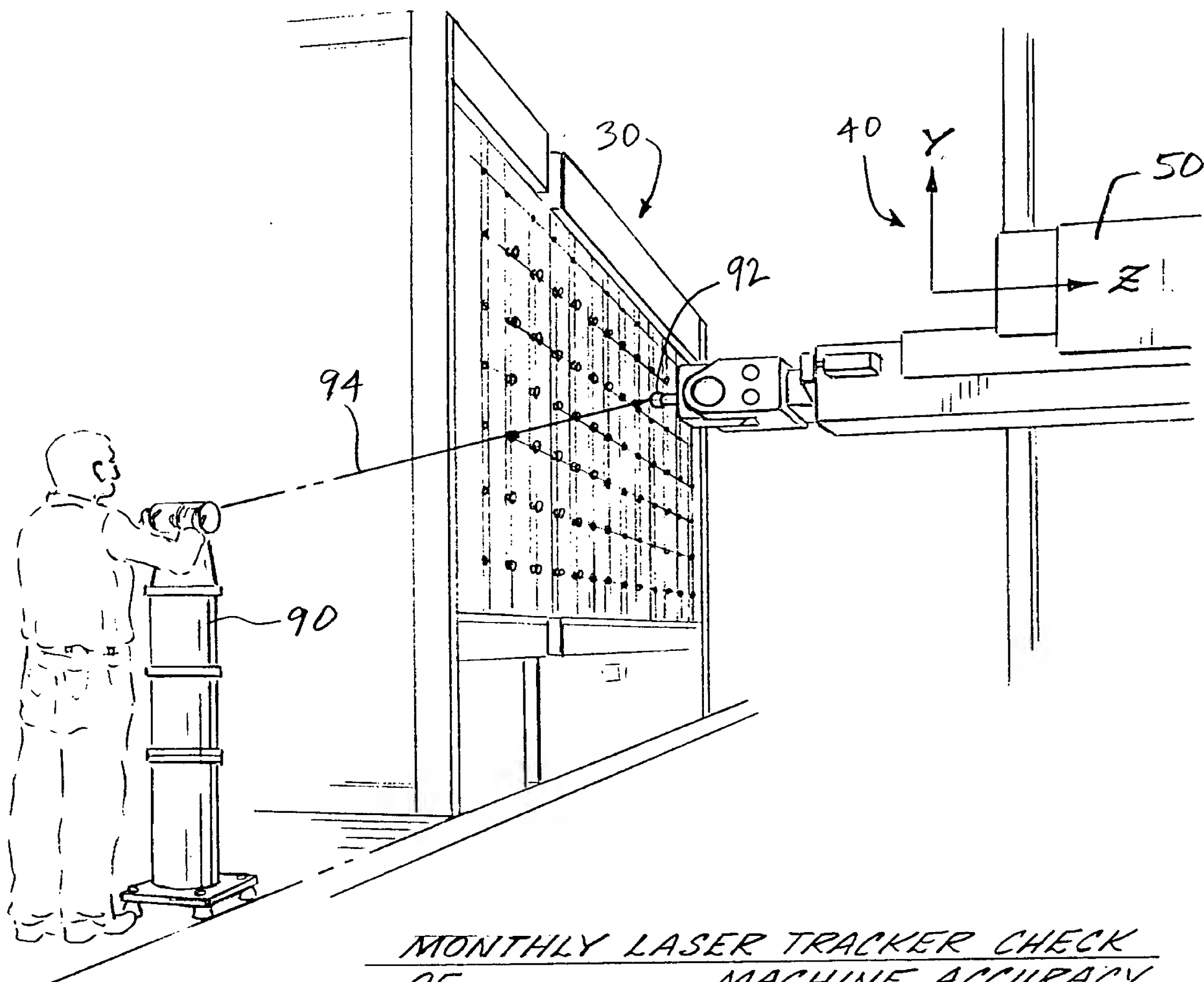
REPEATABLE POSITIONING OF MACHINE

Fig. 8.



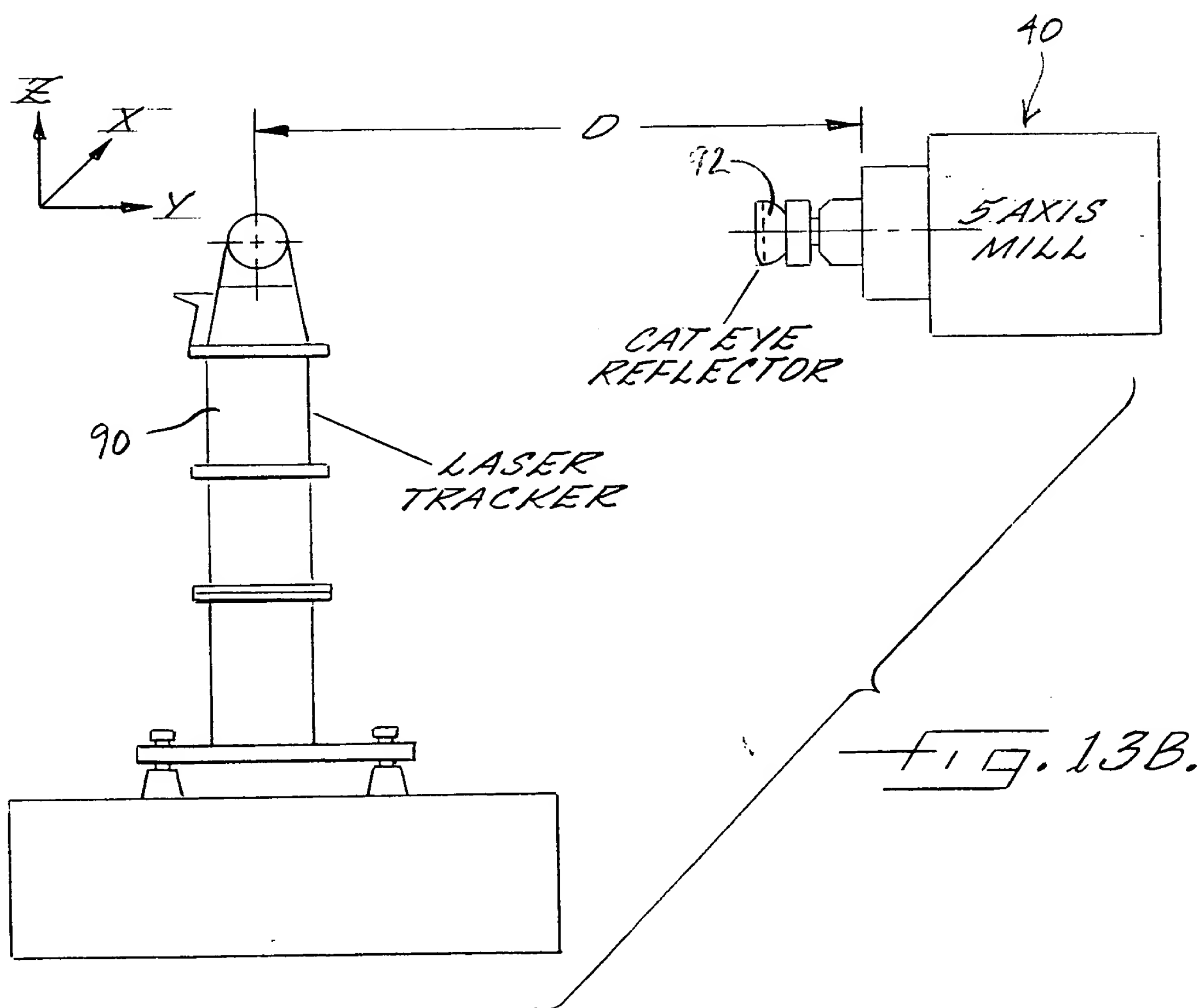
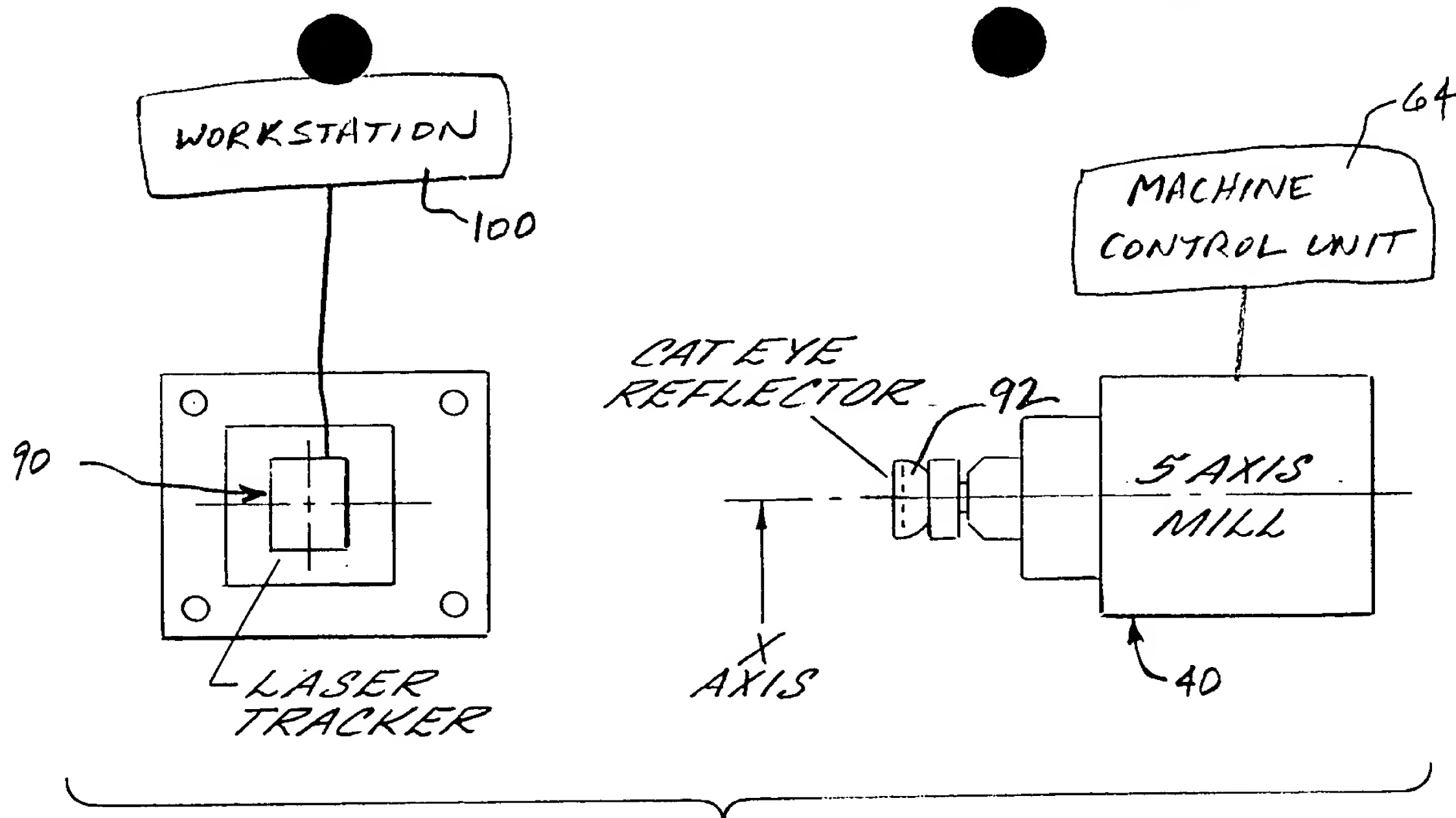
WEEKLY CHECK OF HOLDING
FIXTURE RELATIVE TO THE
MACHINE

FIG. 11.



MONTHLY LASER TRACKER CHECK
OF MACHINE ACCURACY
ALONG X, Y, Z AXES

FIG. 12.



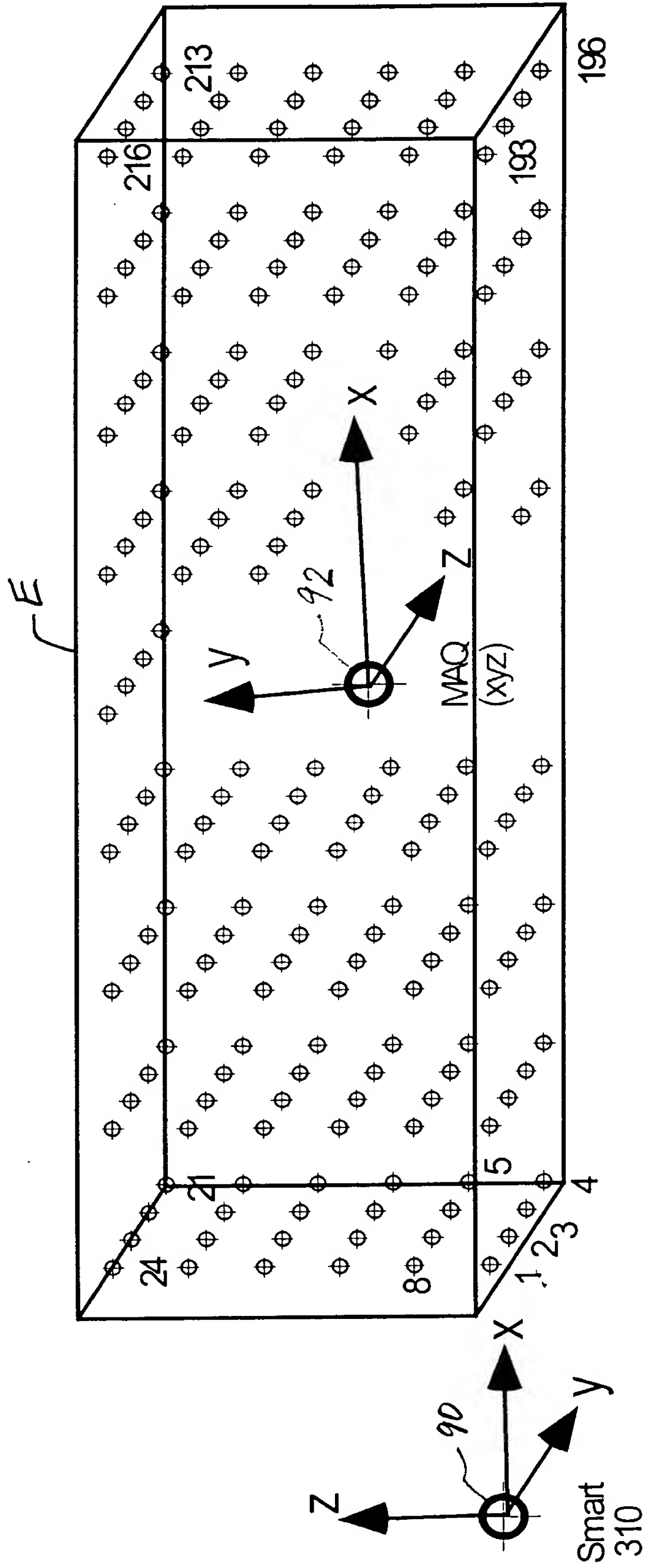


Fig. 14.

X & Y TOLERANCE BAND
SHOWN = ± 0.010
(MAGNIFIED X 300)

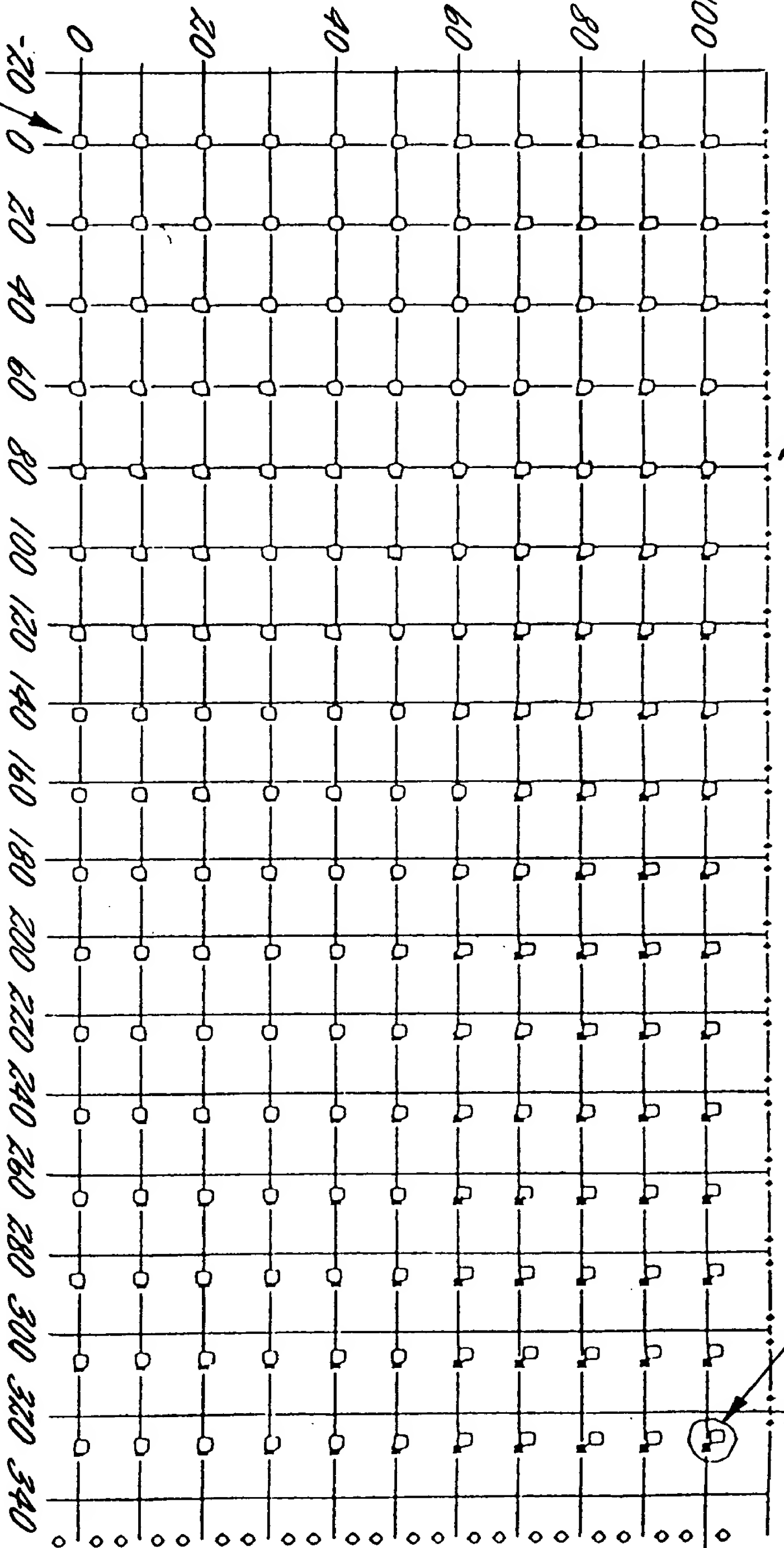
PLANE #4, Z = 44.0

ERRORS PORTRAYED WITH
MAGNIFICATION (X 300)

± 0.010

± 0.010

Y-AXIS



X-AXIS

LOWER-LEFT CORNER OF
CHF WORK ENVELOPE

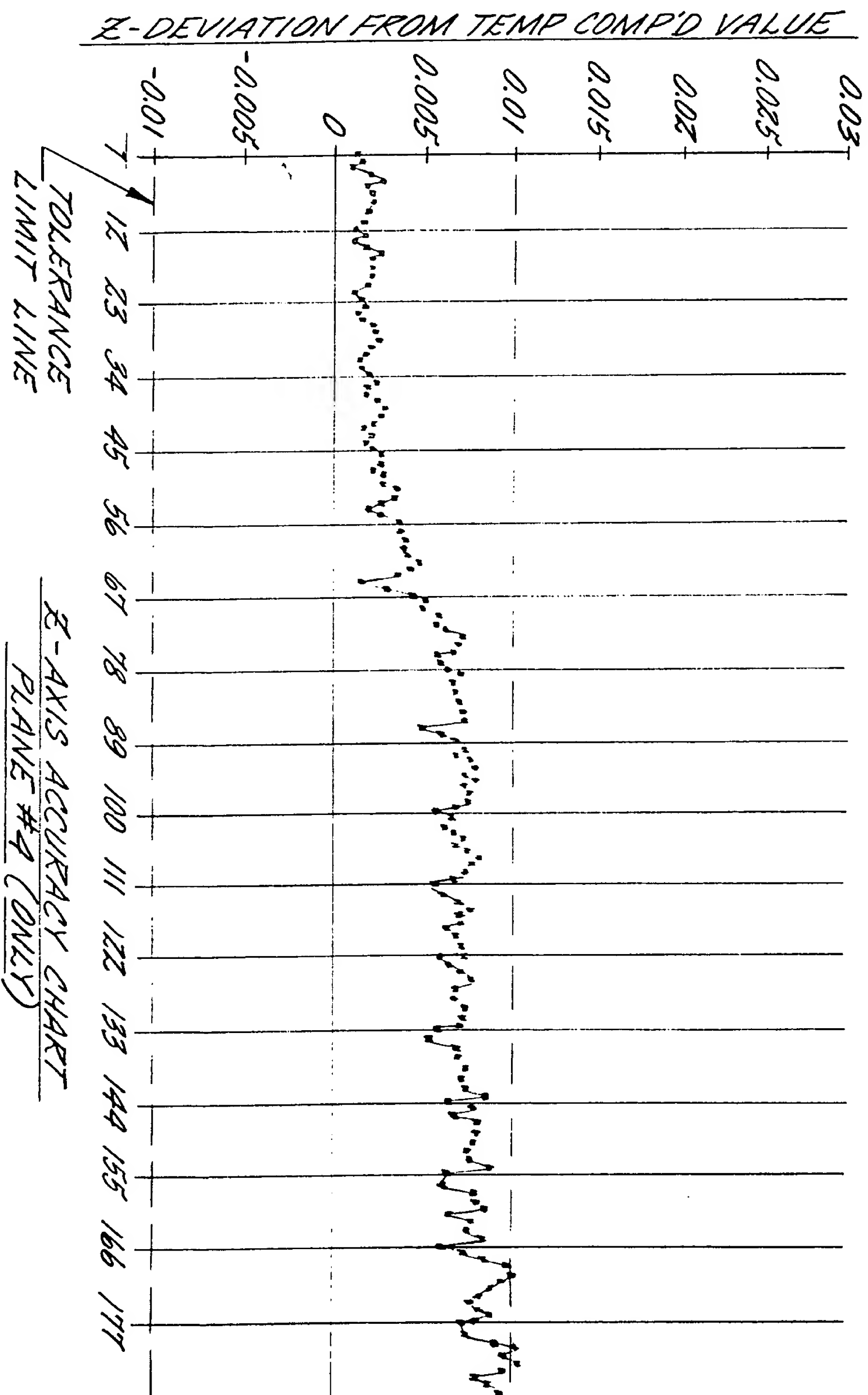
X-Y AXES ACCURACY

CHART

Fig. 16.

- MAGNIFIED INTENDED VALUES
- ◻ MAGNIFIED MEASUREMENTS
- ♦ X-AXIS TOLERANCE
- ◊ Y-AXIS TOLERANCE

PLANE #4, $Z = 44.0$



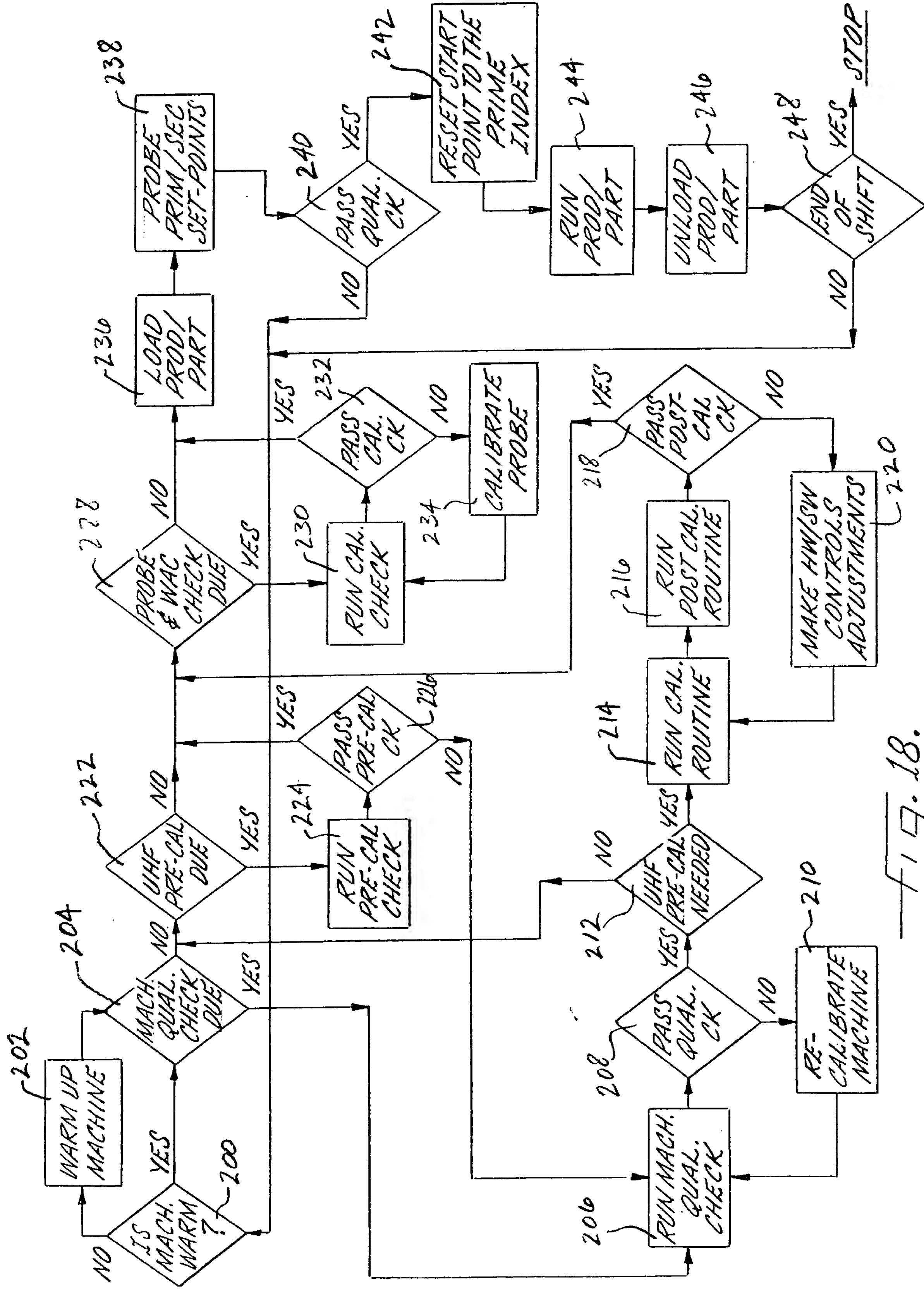
19.17.

[illegible]

Diagram illustrating a circular feature with concentric circles and a coordinate system. The diagram includes the following labels and features:

- OUTER TOL.**: Label pointing to the outermost dashed circle.
- NOMINAL**: Label pointing to the middle solid circle.
- INNER TOL.**: Label pointing to the innermost dashed circle.
- CENTER**: Label pointing to the center of the circles, marked with a crosshair.
- 90**: Label indicating a 90-degree angle, pointing to the positive Y-axis.
- SMART 310**: Label at the bottom left, pointing to the origin of the coordinate system.
- X** and **Y**: Labels for the horizontal and vertical axes, respectively, with arrows indicating the positive directions.

Fig. 15.



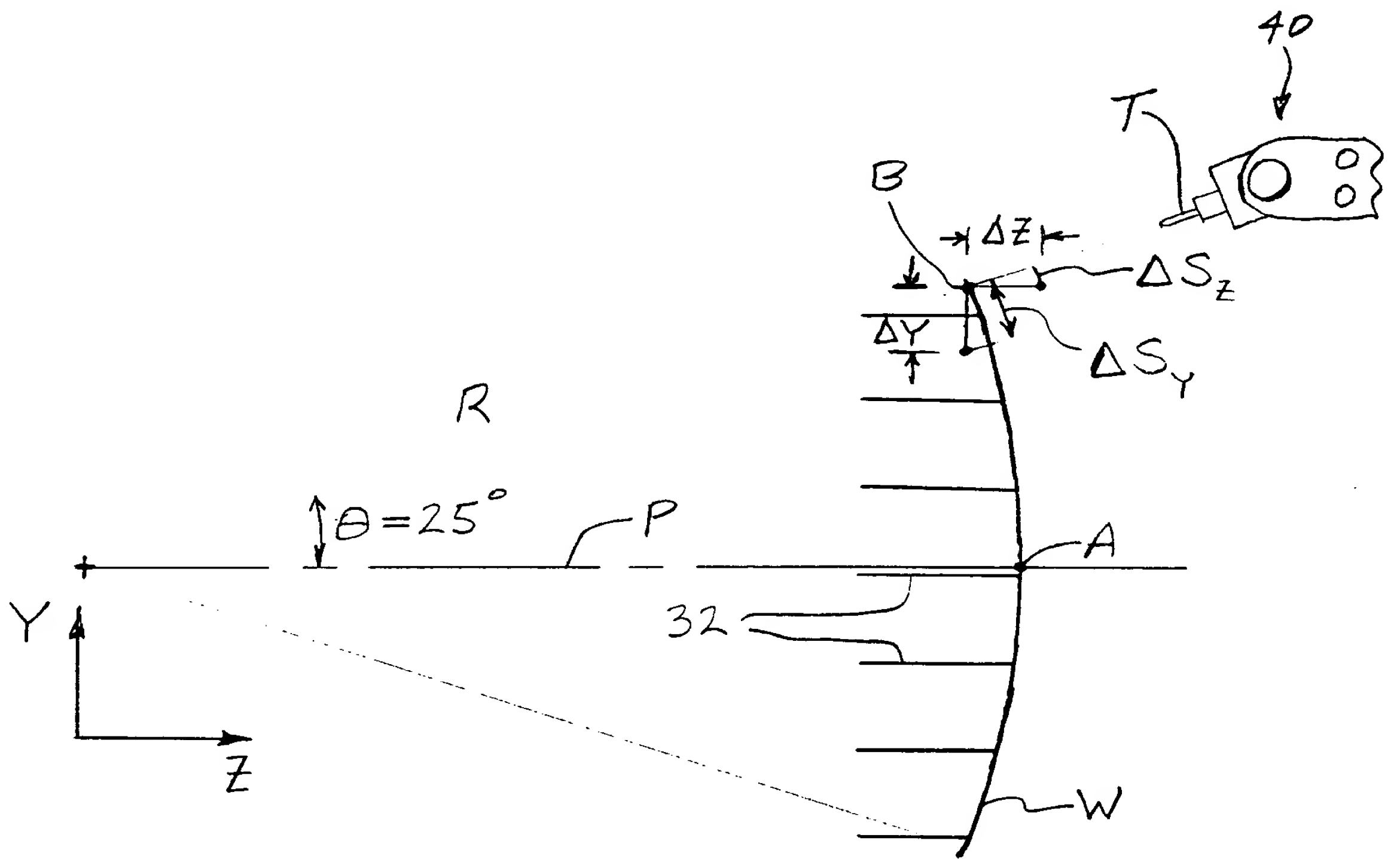


FIG. 19.

PARAMETER AFFECTING HOLE MISLOCATION	PARAMETER TOLERANCE (INCH)	ERROR CONTRIBUTION, ΔS_i (INCH)
POGO Y AND Z LOCATION	0.012	0.0071
FIXTURE SET POINT BLOCK Z ERROR	0.010	0.0042
C-AXIS OFFSET IN Y	0.003	0.0027
COMPOSITE TOOL LENGTH	0.005	0.0021
MACHINE Z ERROR	0.012	0.0101
MACHINE Y ERROR	0.012	0.0218
WAC AXIS Z ERROR	0.012	0.0051
WAC AXIS Y ERROR	0.005	0.0045
DELTA R BETWEEN POGOS	0.050	0.0120
PANEL ANGLE CHANGE EFFECT	1 DEGREE OVER 3 INCHES	0.0005
LOCATOR PIN ERROR	0.003	0.0027
DRILL C-AXIS OFFSET	0.002	0.0020
DRILL ENTRY WANDER	0.002	0.0020
	TOTAL ERROR, ΔS	0.0294

Fig. 20.